

OIE NTTAT Network



1st International Conference on Non Tsetse Transmitted Animal Trypanosomosis

15th and 16th December 2016

Anses, 14 rue Pierre et Marie Curie
94700 Maisons-Alfort



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Tabanids: morphology, biology, direct effects and pathogen transmission

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Abstract

Tabanids are nuisance pests for humans and livestock because of their painful bite and persistent biting behavior. About 4,400 tabanid species have been described; they are seasonally present in all kinds of landscapes, latitudes, and altitudes. Thus, high populations of tabanids can have serious economic impact on outdoor activities, tourism and agriculture. Tabanids have so far received little attention and can then be considered as neglected subject of research. This poster tends to show that they are important vectors of disease agents and provide a brief summary of tabanid morphology, biology, and life cycle. Tabanids are also vectors of animal disease agents, including viruses, bacteria and parasites such as equine infectious anemia virus, *Bacillus anthracis* or *Trypanosoma evansi* responsible of surra. Direct annoyance and stress generated by tabanids are also responsible of immunosuppressive effects which increase the effect of inter-current diseases in their hosts.

Keywords: Tabanid, horse fly, deer fly, cleg, pathogens, livestock, direct effects, mechanical transmission.